



Sheet 1 of 1

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·ar	M	D. Yang et al.; "Comparative analysis of SNR for image sensors with enhanced dynamic range;" SPIE, EL 1999													
ar	N >	E. R. Fossum; "CMOS image sensors: electronic camera-on-chip;" IEEE TRANSACTIONS ON ELECTRON DEVICE, VOL. 44, NO. 10, OCT. 1996													
ar.	ر°	S. Kleinfelder et al.; "A 10K frames/s 0.18µM CMOS digital pixel sensor with pixel-level memory;" DIGEST OF TECHNICAL PAPERS OF THE 2001 IEEE INTERNATIONAL SOLID-STATE CIRCUITS CONFERENCE, PP. 88-99. FEB, 2001													
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av	R X		N. Stevanovic et al.; "A CMOS image sensor for high speed imaging;" ISSCC DIG. TECH. PAPERS, PP. 104-105, FEB 2000				
ho	S	*	S. Kleinfelder et al.; "A 10,000 frames/s 0.18µM CMOS digital pixel sensor with pixel-level memory;" ISSCC DIG. TECH. PAPERS, FEB 2001				
ur	77		O. Yadid-Pecht; "Wide intrascene dynamic range CMOS APS using dual sampling;" IEEE TRANS. ON ELECTRON DEVICES, VOL. 44 NO. 10, PP. 1721-1723, OCT. 1997				
·ur	ر ر	1	D. Yang; et al.; "A 640 X 512 CMOS image sensor with ultra-wide dynamic range floating-point pixel level ADC;" IEEE J. SOLID-STATE CIRCUITS, VOL. 34, NO. 12, PP.1821-1834, DEC. 1999				
w	v کر		D. Yang et al.; "Comparative analysis of SNR for image sensors with enhanced dynamic range; PROCEEDINGS OF THE SPIE, VOL. 3649, SAN JOSE, CA, JAN. 1999				
90	W	1	A. El. Gamal et al.; "Pixel level processing why?, what?, and how?" PROCEEDINGS OF THE SPIE, VOL. 3650, PP. 2-13, JAN. 1999				
iw	x×		S. H. Lim et al.; "Integration of image capture and processing-beyond single chip digital camera;" PROCEEDINGS OF THE SPIE, VOL. 4306, MARCH, 2001				
ur	Υ×		X. Liu et al.; "Photocurrent estimation from mutiple non-destructive samples in a CMOS image sensor;" PROC. OF SPIE, VOL. 4306, MARCH, 2001				
ar	Z		S. J. Decker; " A 256X256 CMOS imaging array with wide dynamic range pixels and column-parallel digital output;" IEEE JOURNAL OF SOLID STATE ICRCUITS, VOL. 33, PP. 2081-1091, DEC, 1998				
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* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							